

## **What I claim is:**

### **Claim 1.**

An artillery shell, rocket, missile, or vehicle comprising a cone shaped tail and a booster fastened to the flat base or to the cone tail, with each booster comprising upper lid and lower lids fitting one inside the other and the space between upper and lower lids is filled with explosive or with gunpowder, with a pin hole in upper lid and another pin hole in lower lid. The pinholes are each filled with dried solidified match material or sparkler compound acting as a delay fuse. Upon cannon or silo's firing, the lower pinhole filled with sparkler material serves as a delay fuse for in-flight explosion. The exploding rear booster causes recoil that speeds up the flying shell and accelerates it to go higher altitude and reach farther range. Multiple boosters are stacked in tandem with about 0.1 – 0.2 seconds delay or more pin hole delay fuse to cause successive explosions and successive recoils to accelerate the trajectory higher in the air and farther in distance. For the cone shaped tail shell, one or more boosters can be fitted to the flat base or to the cone-shaped tail of the shell by themselves or can be stacked in tandem inside a flying cylinder barrel to enhance the power of boosting. With boosters being separated by one-way outwards shooting where the resultant recoils accelerates the shell in-flight and cause it to go higher and reach farther range.

### **Claim 2.**

As in claim 1 where the booster inner lid is screwed to the outer lid to form a tighter and stronger contained space for more powerful explosion and stronger recoil leading to a longer range trajectory.

**Claim 3.**

As in claim 2 with multiple boosters inside the cannon to explode serially and to cause more shell acceleration and faster speed leaving the barrel of the cannon and cause the shell to reach farther range.

**Claim 4.**

As in claim 2 with multiple boosters inside a steel cylinder fastened to the shell base and the boosters are serially stacked inside the cylinder so the outer booster explodes first and its recoil cause a midair speed up and where the recoil of each serial exploding booster causes further midair acceleration causing higher altitude and making the shell reach farther range.

**Claim 5.**

As in claim 2 with multiple boosters inside a barreled grooved or smooth cylinder attached to the shell base and boosters are serially screwed inside the cylinder with unsymmetrical grooves vertical on the inside and slanted on the outer side making the explosion one-way only towards the outside causing a recoil to further accelerate midair motion of the shell and where the grooves arrangement makes tighter and stronger closure so the power of each explosion of each booster is increased.

**Claim 6.**

As in claim 5 where the trajectory is a satellite accelerated by many boosters inside the barreled cylinder attached to the satellite base and the boosters are serially screwed inside the cylinder with unsymmetrical slanted vertical on the inside and slanted on the outer side making the

explosion one-way only towards the outside causing a recoil that further accelerates midair speed of the trajectory and where the grooves arrangement makes tighter and stronger closure so the explosion of each booster is increased.

**Claim 7.**

As in claim 2 with multiple boosters inside the cannon to explode serially after the shell passes by the internal side-located booster and to cause more shell acceleration and causes a shell faster speed when leaving the barrel of the cannon to reach a farther range

**Claim 8.**

As in claim 2 with multiple boosters to explode serially and to cause more shell acceleration and farther range.

**Claim 9.**

As in claim 1 where the flat based shell is changed to cone shape while the weight and pay load of the shell remains unchanged.

**Claim 10.**

As in claim 1 where a series of concentric inward slanted rings with the outer ring is fastened to the flat base and where inner rings are loose and where during midair flight the inner rings are pulled backward to form a cone shape enclosure tail to reduce drag.

**Claim 11.**

As in claim 5 where the rings forming the cup or cone shape enclosure has inner lips at the bottom and outer lips at the top to form an in-flight stronger cone shape that reduces drag.

**Claim 12.**

As in claim 6 where a flexible folded rubber or cloth material is fastened to the flat base of the shell that unfolds in-flight to form a cone shape tail to reduce drag.

**Claim 13.**

As in claim 7 where a wood cone is fastened to the flat base of the shell.

**Claim 14.**

As in claim 2 where the boosters are stacked into a smooth steel cylinder with outer diameter smaller than that of the shell. The explosion of a booster is similar to firing a shotgun blanks that give stronger and more recoil to further accelerate the flying shell to which it is fastened.

**Claim 15.**

As in claim 2 where the flying shell is stabilized by two or more thin flexible steel wires.

**Claim 16.**

As in claim 2 where the tail of the shell is attached to a small ball or few fins to assure in-flight stability of the trajectory.

**Claim 17.**

As in claim 1 where the vehicle or rocket is fired from a high flying plane

**Claim 18.**

As in claim 1 where the vehicle, missile, or rocket is fired from a high flying plane and carries a payload to higher altered around 100,000 feet that accelerates to a higher horizontal speed for faster travel, transport, delivery, or targeting a remote location.

**Claim 19.**

As in claim 1 where the vehicle, missile, or rocket is fired from a high flying plane and is guided by GPS to reach destination with its payload.

**Claim 20.**

As in claim 1 where the vehicle, missile, or rocket is fired from a high flying plane and is guided to go vertically upwards to reach an orbit suitable for satellite launching.

**Claim 21.**

As in claim 1 where the vehicle, missile, or rocket is fired from a ground silo pointing vertically upwards and accelerating at low G suitable for human fast travel.